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Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
. •		10/004,019	TOH ET AL.				
Č	Office Action Summary	Examiner	Art Unit				
		Shin-Hon Chen	2131				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
2a)⊠ T 3)□ S	Responsive to communication(s) filed on <u>23 O</u> his action is FINAL . 2b) This lince this application is in condition for allowal losed in accordance with the practice under E	action is non-final.					
Dispositio	n of Claims						
5)☐ C 6)⊠ C 7)☐ C	Claim(s) 1-57 is/are pending in the application. a) Of the above claim(s) is/are withdraw is/aim(s) is/are allowed. Claim(s) 1-57 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	wn from consideration.					
Application	n Papers						
10)⊠ TI A R	ne specification is objected to by the Examine ne drawing(s) filed on <u>18 October 2001</u> is/are: pplicant may not request that any objection to the eplacement drawing sheet(s) including the correct ne oath or declaration is objected to by the Ex	a) \square accepted or b) \square objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority un	der 35 U.S.C. § 119						
a) <u></u> 1 2 3	cknowledgment is made of a claim for foreign All b) Some * c) None of: Certified copies of the priority documents Copies of the certified copies of the priority documents application from the International Bureau e the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
2) Notice (3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) tion Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

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DETAILED ACTION

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1. Claims 1-44 are rejected.

Allowable Subject Matter

2. The following is a statement of reasons for the indication of allowable subject matter:
Claims 45-57 are allowable. The closest prior art of record discloses generating escrow key for sender when the recipient's public key is not present. However, the prior art of record does not explicitly disclose means for generating an escrow key for encrypting the document if the means for searching does not return a public key for the recipient; means for requesting the recipient's public key from the recipient; means for storing said document in escrow until receipt of the recipient's public key; means for unencrypting the document using an escrow decryption key; and means for re-encrypting the document using the recipient's encryption key prior to sending the document to the recipient in light of other features disclosed in independent claim 45 and the specification.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim limitation discloses that the unencryption escrow key for unlocking said escrow key is not made available to said recipient when the document is encrypted with the escrow encryption key. However, the specification ([0096] pages 33-34: the OC200 or escrow manager could transmit the escrow decryption key as part of the delivery to the receiving system 300). Furthermore, the claim does not disclose information as to how the system operates when the escrow key is not made available. Therefore, examiner will examine the claim by interpreting that the key is made available to recipient.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 6. Claims 1-4, 6-16, 21-36, 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham US (6,327,611) in view of Walker et al. U.S. Pub. No. 20020023213 (hereinafter Walker).
- 7. As per claim 1, 29, and 30, Everingham discloses a method for delivering a document from a sender to a next stage on a routing list comprising the steps of: receiving an indication that the sender desires to deliver a document to a next stage on a routing list for the document

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(Everingham: column 5 lines 31-36) and identifying a recipient from the next stage on the routing list (Everingham: column 5 lines 34-36). Everingham does not explicitly disclose setting a key for encrypting the document equal to a public key of the recipient; providing an escrow key not equal to the recipient's public key, and setting the key equal to the escrow encryption key if said recipient's public key cannot be located; encrypting the document prior to sending said document using the key, and providing the encrypted document to the recipient. However, Walker discloses providing recipient's public key to the sender and if the public key cannot be retrieved, the server will generate escrow key pair for the sender and the escrow key pair is not equal to the sender's private key, wherein an escrow unencryption key for unlocking said escrow encryption key is made available to said recipient (Walker: [0041]). It would have been obvious to one having ordinary skill in the art to encrypt a message using recipient's public key prior to sending the message to a recipient. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Walker within the system of Everingham because it allows the sender to encrypt data regardless whether there's existing public key for the recipient.

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- 8. As per claim 2, Everingham as modified discloses the method of claim 1 further comprising defining and storing the routing list before an originating sender indicates a desire to deliver the document to the routing list (Col 4, Lines 12-19)
- 9. As per claim 3, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses the method comprising receiving the routing list and an indication that

the user desires to deliver the document to the list and storing the routing list (Everingham: column 5 lines 31-42).

- 10. As per claim 4 and 30, Everingham as modified further discloses sending the message encryption key to the sender (Walker: [0041]).
- 11. As per claim 6, Everingham as modified discloses the method of claim 4. Everingham as modified further discloses the sender encrypting the document using the message encryption key; and the sender delivering the encrypted document to the recipient (Walker: [0041]).
- 12. As per claim 7, Everingham as modified discloses the method of claim 1 further comprising the sender delivering the document to the recipient. (Everingham: column 5, lines 43-47; Walker: [0041]).
- 13. As per claim 8, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the routing list is identified by a routing list identifier; and the step of receiving an indication that the sender desires to deliver a document to a next stage on the routing list includes receiving the routing list identifier (Everingham: column 5, lines 33-39).
- 14. As per claim 9, Everingham as modified discloses the method of claim 8. Everingham as modified further discloses wherein the routing list identifier includes an email address of said routing list (Everingham: column 4, lines 1-11).

- 15. As per claim 10: Everingham discloses the method of claim 8 wherein the routing list identifier an address at a domain name of a web page for routing lists (Everingham: column 4, lines 1-11).
- 16. As per claim 11, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the next stage in the routing list comprises a group of recipients; and the step of identifying a recipient from the next stage comprises identifying at least one of the recipients group (Everingham: column 6 lines 57-64).
- 17. As per claim 12 and 32, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the step of receiving an indication that the sender desires to deliver a document to a next stage on the routing list comprises: receiving a query from the sender for an identity of a recipient from the next stage on the routing list (Everingham: column 6, lines 57-64).
- 18. As per claim 13, Everingham as modified discloses the method of claim 12. Everingham as modified further discloses the method comprising: tracking a current recipient of the document from the routing list; and in response to the query (Everingham: column 4 lines 34-40); returning an error message, if the routing list cannot be located or the querying sender is not the current recipient (Everingham: column 4 lines 40-55); and returning the identity of at least

one recipient from the next stage of the routing list, if the querying sender is the current recipient (Everingham: column 5 lines 43-47).

- 19. As per claims 14 and 34, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses the method comprising tracking a current recipient of the document from the routing list (Everingham: column 5 line 66 column 6 line 7).
- 20. As per claim 15, Everingham as modified discloses the method of claim 14. Everingham as modified further discloses the method comprising receiving confirmation that the recipient has received the document; and updating the current recipient of the document to reflect the received confirmation (Everingham: column 5 line 45 and column 5 line 66 column 6 line 7).
- 21. As per claims 16 and 35, Everingham as modified discloses the method of claim 1. Everingham further discloses wherein the routing list includes rules (Everingham: column 3 lines 62-63).
- 22. As per claims 21 and 41, Everingham as modified discloses the method of claim 1. Everingham as modified further discloses wherein the step of receiving an indication that a sender desires to deliver a document to the next stage on a routing list comprises receiving a form containing rules for the routing list (Everingham: column 4 lines 12-30 and column 5 lines 43-60: the control portion contain rules information along with the routing list).

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23. As per claims 22 and 42, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses wherein the step of receiving an indication that the

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sender desires to deliver a document to a next stage on a routing list comprises receiving a

routing parameter for the routing list (Everingham: column 5 lines 33-39).

24. As per claims 23 and 40, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses wherein the step of receiving an indication that a

sender desires to deliver a document to a next stage on a routing list for the document comprises

receiving the document along with an indication (Everingham: column 5 lines 31-42).

25. As per claim 24, Everingham as modified discloses the method of claim 23. Everingham

as modified further discloses the method comprising delivering the document to the recipient

(Everingham: column 5 lines 43-47).

26. As per claim 25, Everingham as modified discloses the method of claim 23. Everingham

as modified further discloses the method comprising delivering the document in read-only mode

to the recipient (Everingham: column 6 lines 22-27).

27. As per claim 26, Everingham as modified discloses the method of claim 23. Everingham

as modified further discloses encrypting the document using the message encryption key before

delivering the document to the recipient (Walker: [0041]).

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28. As per claim 27 and 43, Everingham as modified discloses the method of claim 1.

Everingham as modified further discloses the method comprising authenticating the sender's

public key, establishing a secure connection with the sender and receiving the document from the

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sender via the first secure connection (Everingham: [0004]: authenticating the sender using the

sender's public key when the message is encrypted by sender's private key).

29. As per claim 28, 44, and 57 Everingham as modified discloses the method of claim 27.

Everingham as modified further discloses authenticating the recipient using the recipient's public

key; establishing a second secure connection with the recipient; and transmitting the document to

the recipient via the second secure connection (Walker: [0041]).

30. As per claim 31, Everingham as modified discloses the computer program product of

claim 29 wherein the routing list is identified by an email address (Everingham: column 4 lines

1-11); and the step of receiving an indication includes receiving the email address (Everingham:

column 5 lines 33-39).

31. As per claim 32, Everingham as modified discloses the computer product program of

claim 29. Everingham as modified further discloses wherein the routing list is identified by an

address at a domain name for routing lists (Everingham: column 4 lines 1-11); and the step of

receiving an indication includes receiving the address (Everingham: column 5 lines 33-39).

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32. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham in view of Walker and further in view of Bouchard et al. U.S. Pub. No. 20020091928 (hereinafter Bouchard).

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- 33. As per claim 5, Everingham as modified discloses the method of claim 4. Everingham as modified does not explicitly disclose wherein the step of sending the key to the sender comprises: sending to the sender a digital certificate containing the recipient's public key. However, Bouchard discloses a server locating and retrieving a recipient's public key through digital certificate (Bouchard: [0049]-[0050]). It would have been obvious to send the digital certificate to the sender so that the sender can retrieve the public key for encryption because they are analogous art. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Bouchard within the combination of Everingham-Walker because transmitting digital certificate to send public key is well known in the art.
- 34. Claims 17-20, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everingham in view of Walker and further in view of Geiger et al. US (6,073,142).
- 35. As per claims 17 and 36, Everingham as modified discloses some rules being applied to the routed document and the routing list but the combination of Everingham and Walker doesn't show the rules encapsulated in forms. However Geiger discloses a system for document routing in a networked environment where the document reviewing rules are encapsulated into a form

(Geiger: column 15 lines 55-67 and FIG. 8). Therefore it would been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to encapsulate the rules into a form for the rules engine. One would be motivated to do so in order to enable the system to provide the ability to define business rules and distribution control over various types of data objects.

- 36. As per claims 18 and 37, Everingham as modified discloses some rules being applied to the routed document and the routing list but the combination of Everingham-Walker does not explicitly disclose the rules embodying business processes. However Geiger discloses a system for document routing in a networked environment where the document reviewing rules are embodied in a business process (Geiger: column 12 lines 53-66 and column 13 lines 15-25). Therefore it would been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to embody a business process into the rules. One would be motivated to do so in order to enable the system to provide the ability to define business rules and to control distribution over various types of data objects in light of business communication policy (Geiger: column 3 lines 1-20).
- 37. As per claims 19 and 38, Everingham as modified discloses the routing list as being an ordered group of email addresses recipients but the combination of Everingham-Walker does not explicitly disclose the routing list including conditional recipients. However Geiger discloses a system for document routing in a networked environment where the document the routing list includes a conditional recipient (Geiger: column 22 lines 48-57). Therefore it would been

obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to include a conditional recipients in the routing list. One would be motivated to do so in order to enable the system to provide review of messages according to the message proprieties and content and to control distribution over various types of data objects in light of business communication policy (Geiger: column 3 lines 1-20).

38. As per claims 20 and 39, the combination of Everingham and Kara does not explicitly disclose the step of receiving an indication that the sender desires to deliver the document comprising receiving a parameter from the sender, wherein the recipient depends on the parameter received. However Geiger discloses a system for document routing in a networked environment where the document the routing list includes a conditional recipient (Col 10, Lines 54-62). Therefore it would been obvious to one ordinary skilled in the art at the time the invention was made to modify the combination of Everingham-Walker with the teachings of Geiger to include a conditional recipients in the routing list. One would be motivated to do so in order to enable the system to provide review of messages according to the message proprieties and content and to control distribution over various types of data objects in light of business communication policy (Col 3, Lines 1-20).

Response to Arguments

39. Applicant's arguments filed on 10/28/06 have been fully considered but they are not persuasive.

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Regarding applicant's remarks, applicant argues that the escrow key disclosed by Walker is equal to the public key of recipient. However, Walker discloses that the locking key is provided when the recipient's public key is not present. Therefore, the key issued by the server is not equal to the recipient public key (Walker: [0041]: the locking keys) and applicant's argument is respectfully traversed.

Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Lastly, applicant is advised to incorporate limitation of claim 45, which was indicated as allowable matter, into claims 1 and 29 to expedite prosecution.

Conclusion

40. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Shin-Hon Chen Examiner Art Unit 2131

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